Informatics at CDC and the State of PHIN

Presented by
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What is Public Health Informatics?

Definition:

- Informatics: The collection, classification, storage, retrieval and dissemination of recorded knowledge.
- Public health informatics can be defined as the systematic application of informatics, computer science and technology to public health practice, research and learning.

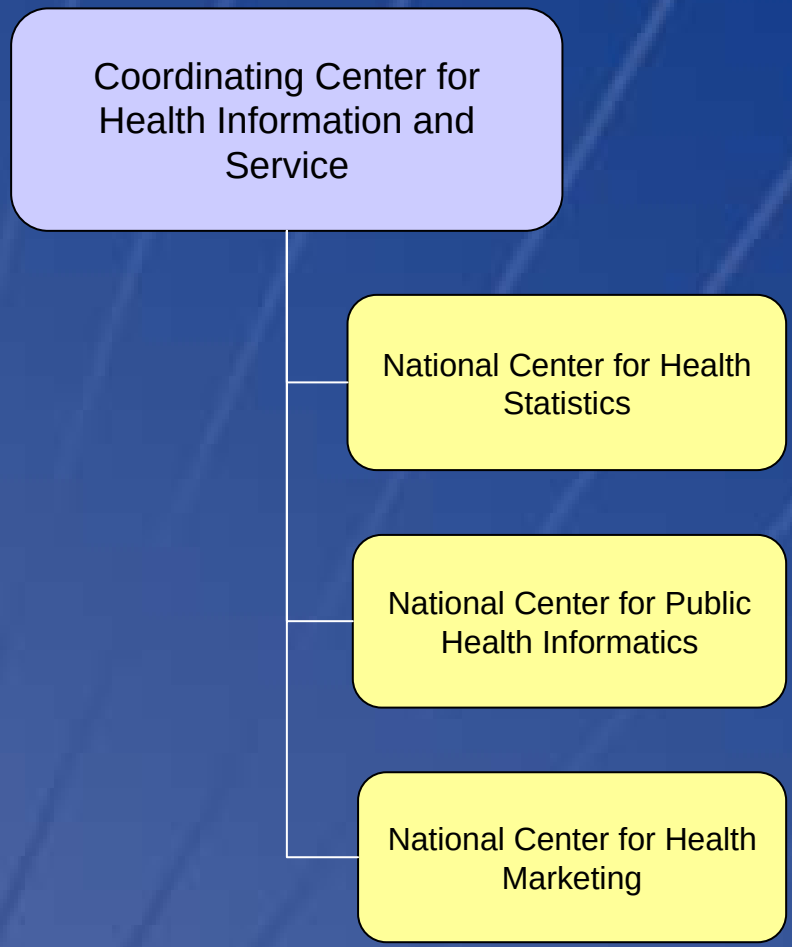
NCPHI's Mission

- To protect and improve the public's health through discovery, innovation, and service in health information technology and informatics.

NCPHI's Role in Public Health Informatics

- Provide national leadership in public health informatics through:
  - Developing and promoting the science of public health informatics
  - Supporting the necessary research and workforce bases for this growing discipline
  - Establishing strong partnerships and facilitating coordinated activities
  - Ensuring strong representation for public health in all national HIT initiatives

NCPHI within CDC



NCPHI Structure

National Center for Public Health Informatics

Office of the Director provides overall direction for communications, strategy, science and policy

- **Alliance Management & Consultation** — Partnerships and communications supporting informatics Initiatives such as PHIN
- **Emergency Preparedness & Response** — Science of early event detection and emergency preparedness informatics programs such as BioSense
- **Informatics Shared Services** — Informatics service development such as PHIN message specifications, public health directory and vocabularies
- **Knowledge Management** — Science of knowledge sharing to improve practice and innovation: Epi-X, communities of practice
- **Integrated Surveillance Systems & Services** — Standards and applications for national surveillance programs

PHIN Purpose and Goals

- Build the capacity for public health to exchange and use electronic information to improve health outcomes and public health practice
  - Ensure that public health partners work together using an information infrastructure based on national standards.
  - Ensure public health information systems are available and utilized to support routine activities as well as emergency preparedness and response.
  - Provide all public health agencies with appropriate and timely information to support informed decision making.
  - Ensure synergy between PHIN requirements and national initiatives.

PHIN Preparedness and CDC's Health Protection Goals

Healthy People in Every Stage of Life:

All people, and especially those at greater risk of health disparities, will achieve their optimal lifespan with the best possible quality of health in every stage of life.

Healthy People in Healthy Places:

The places where people live, work, learn, and play will protect and promote their health and safety, especially those at greater risk of health disparities.

People Prepared for Emerging Health Threats:

People in all communities will be protected from infectious, occupational environmental, and terrorist threats.

Healthy People in a Healthy World:

People around the world will live safer, healthier, and longer lives through health promotion, health protection, and health diplomacy.

PHIN and Partner Preparedness Goals

- Build and strengthen public health information technology infrastructure
- Assess benefits and address challenges of applying informatics to public health
- Exchange data among public health organizations and with private sector

PHIN in the Fourth Year

Year 1 - Proposed a standards-based public health network

Year 2 – Used first PHIN funding to focus on the functions of public health preparedness

Year 3 – Initiated expansion of PHIN Framework beyond preparedness

Year 4 – Align PHIN goals with National Health IT (HIT) initiative

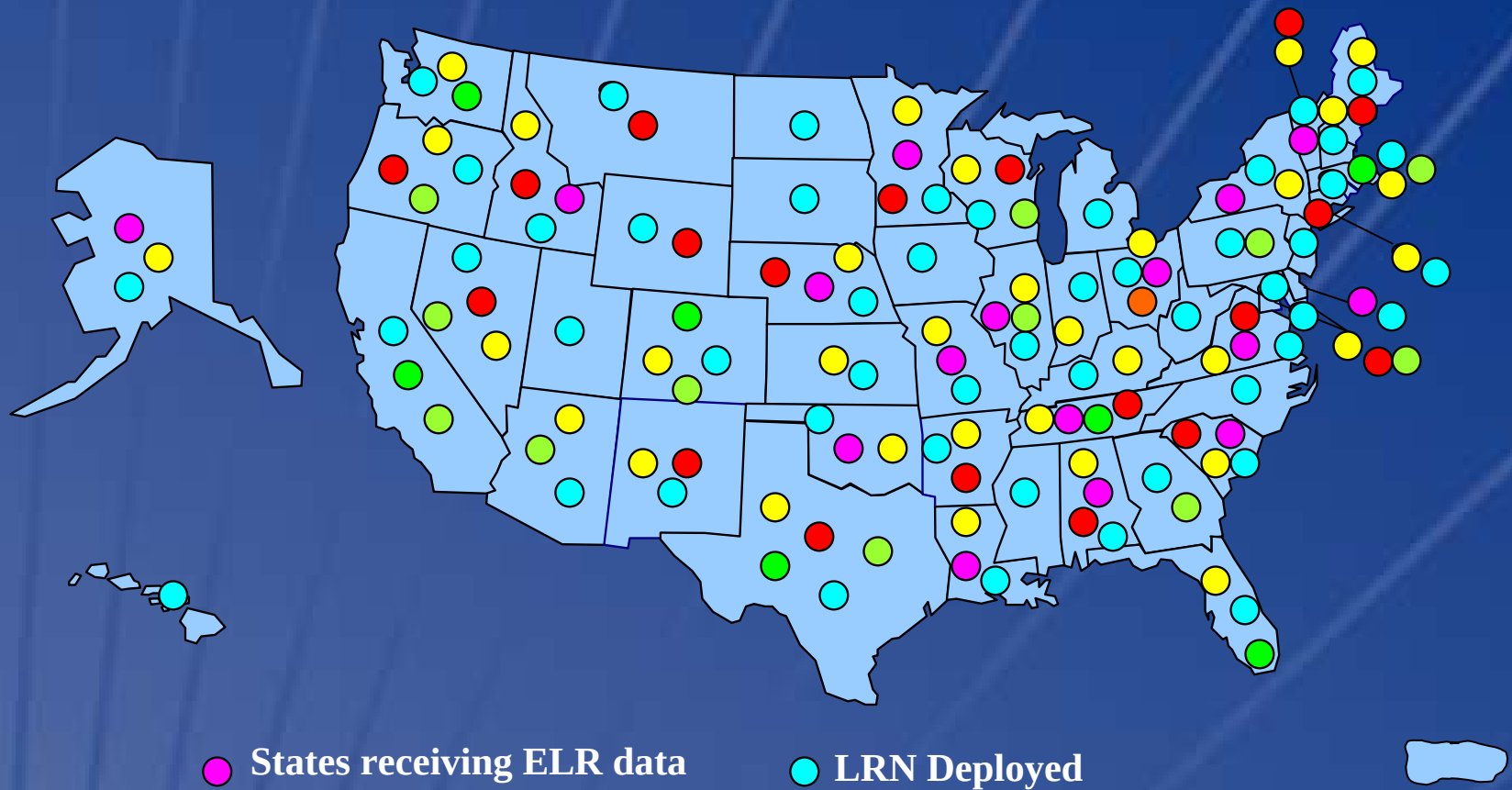
2006 PHIN Initiative Accomplishments

- Expanded opportunities for partner involvement in shaping PHIN through work shops, working groups and webinars
- Advanced development and adoption of industry standard-based specifications
  - BioSense and Simplified Case Notification message specifications
  - Simplified Standardized Case Notification Message Specification
  - Directory Exchange and Partner Communications and Alerting implementation guides
- Enhanced processes, tools and services to assist partners in implementing PHIN
  - PHIN MS – 189,000 -> 800,000 messages in 2006
  - PHIN Vocabulary Access and Distribution System – Enhanced version released
- Began process to restructure PHIN requirements

Additional Progress in Support of PHIN

- Increased implementation of CDC developed applications
  - BioSense - 10 Hospitals in 2005, goal of 350 real-time data sources in 2006
  - Laboratory Response Network Results Messenger v2.0 (LRN RM) - deployed in 118 (78%) of 150 target LRN laboratories
  - NEDSS Base System (NBS) – Deployed to 13 states; more than 150,000 NND messages sent to CDC in 2006 via NBS in 13 states.
  - NEDSS PAM Platform (NPP) – Final beta testing underway in Ohio; evaluation currently underway by a number of states
  - Countermeasure and Response Administration (CRA) – Expanded to meet Pandemic Influenza aggregate reporting requirements
  - Active Outbreak Management System (OMS) “community of practice” - states sharing lessons toward improved implementation
  - Developed Partner Communication and Alerting System (PCA)

Total PHIN Deployment At A Glance



- States receiving ELR data
- PHIN MS Deployed
- NBS Deployed
- BioSense PHIN MS Deployed
- LRN Deployed
- OMS Evaluation/Deployed
- NPP Deployed

PHIN Emphasis for FY 2007

- Align PHIN with National HIT initiatives
- Expand PHIN Collaboration
  - Communications
  - PHIN Architecture
  - Restructure PHIN Requirements
- Streamline Certification Process
- Implement and Expand Shared Services and Solutions
- Design PHIN Evaluation
  - Examine impact of PHIN on the practice of public health
  - Define methods to measure progress toward PHIN compliance

4th Annual Public Health Information Network Conference

Thank you!

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National Center for Public Health Informatics

Centers for Disease Control and Prevention